Cancer Registration

Publication No. E10-10662 Volume 5, No. 1

TEXAS CANCER REGISTRY

TEXAS Department of State Health Services

Helpful Tips on Rules & Guidelines

This Month's Topic : **Treatment Modalities**

Types of Treatment

Curative - active treatment designed to cure an existing disease. Examples of curative treatment would be mastectomy for breast cancer or radiation therapy for stage I Hodgkin's disease.

Adjuvant therapy – treatment which aids another and is used in addition to or following the primary treatment, such as the use of chemotherapy, radiation, hormonal or biological therapy after surgery. Examples of adjuvant therapy would be chemotherapy after a mastectomy in a lymph node positive patient or intracavitary radiation after surgery for an aggressive endometrial cancer.

Palliative – treatment designed to relieve pain, symptoms and distress, but which does not attempt a cure. Examples of palliative treatment would be radiation therapy for painful spinal metastases or bypass surgery for a blocked common bile duct.

Supportive – treatment that is primarily directed to sustain the strength of the patient. Examples would be steroids to increase appetite or blood transfusions for anemia.

Treatment Modalities

Surgery generally involves treatment of disease by removing of tissue by cutting into the body (incision). For some types of surgery, the knife (scalpel) has been replaced with a laser beam.

Types of surgery:

Diagnostic for histological diagnosis

Aspiration biopsy (needle aspiration biopsy, fine needle biopsy, fine needle aspiration, and suction biopsy) – removal of a small piece of tissue or fluid from a suspicious mass by a hypodermic needle and syringe.

Needle biopsy (core needle biopsy, wide-core needle biopsy) – removal of tissue for microscopic examination. A miniscule cutting instrument is inserted through a special needle to cut and extract the tissue sample.

Incisional biopsy- removal of part of a tumor for microscopic examination.

Excisional biopsy (surgical biopsy, punch biopsy, and shave biopsy) – removal of a tumor or lesions for microscopic examination. In breast cancer when the entire lump is removed the excisional biopsy is a lumpectomy.

Staging to determine the extent of disease

Exploratory surgery

Definitive, also known as curative, to excise as much tumor as possible

Local tumor destruction: cryosurgery, electrocautery, fulguration and laser surgery
Local excision: local wide excision, lumpectomy
Complete/total excision
Radical excision with or without lymph node dissection

Reconstructive to repair anatomic defects and improve function and cosmetic appearance

Post-mastectomy reconstruction

Palliative to relieve symptoms, obstruction, pain

Interrupt nerve pathways to alleviate pain
Bypass an obstruction to allow fluid flow and alleviate obstructive pain

Supportive to sustain the patient or improve the quality of life

Gastrostomy tubes for enteral nutrition
Venal access devices implanted for palliative chemotherapy or morphine administration

Preventive to avoid cancer by removing an organ likely to develop a malignancy, based on familial history or genetic expectations

Total colectomy for familial polyposis colonae syndrome
Bilateral mastectomies for a strong family history of breast cancer

Special techniques

Electrosurgery – surgical procedure using high frequency electrical current to cut and coagulate tissue and blood. Used in treatment of cancers of the skin, mouth, kidney, ureter, and rectum.
Chemosurgery – for skin cancers, using a anticancer chemical paste to shrink or destroy cancer tissue/ tumor before or instead of surgery.
Cryosurgery – a surgical procedure freezing the tumor with liquid nitrogen to remove it. Used in the treatment of liver, prostate, cervical and skin cancer.
Laser surgery – treatment of some forms of cancer by using a light beam to cut and coagulate tissues. Three types of laser are:

Carbon dioxide is used primarily in surgery with relatively little bleeding.
Argon is used in dermatology and eye surgery and used to treat tumors in photodynamic therapy.
Neodymium: yttrium-aluminum-garnet (Nd:YAG) can penetrate deeper and cause blood to coagulate quickly and can be carried to less accessible parts of the body through optical fibers.

Resources:

Principles and Practice of Cancer Registration, Surveillance, and Control, Rollins School of Public Health, Emory University, 2005 Edition;
The Cancer Dictionary, Revised Edition, Altman/Sarg. M.D.;
Inquiry and Response System